

Notice of Allowability

Application No.

10/733,449

Examiner

Yonel Beaulieu

Applicant(s)

KOBAYASHI ET AL.

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to paper filed 12/12/03.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 12/12/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Yonel Beaulieu
YONEL BEAULIEU
PRIMARY EXAMINER

Examiner's Amendment

The Application has been amended as follows:

IN THE SPECIFICATION (abstract)

- -An electric drive control apparatus which prevents the voltage from being saturated and does not cause the driver to feel uncomfortable during driving. The electric drive control apparatus includes an electrically operated machine, an instruction value calculation processing unit that calculates an instruction value based on a target electrically operated machine torque and on the rotational speed of the electrically operated machine, an output signal calculation processing unit that calculates an output signal based on the instruction value, a current generating unit that generates a current based on the output signal and supplies the current to the electrically operated machine, a change-in-the-voltage-saturation calculation processing unit that calculates a change in the voltage saturation that varies depending upon the degree of occurrence of the voltage saturation accompanying the drive of the electrically operated machine, and a change-in-the-control-quantity correction processing unit correcting a magnetic pole position depending upon the change in the voltage saturation. - -

Allowable Subject Matter

Claims 1 – 16 are allowed.

The prior art of record fail to teach an electric drive control apparatus and method comprising, among other limitations, calculation processing means for *calculating*,

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based on a calculated instruction value, a change in voltage saturation that varies depending upon the degree of occurrence of the voltage saturation accompanying the drive of an electrically operated machine and a correction processing means for correcting a change in the control quantity based upon the change in the voltage saturation, the change quantity being a magnetic pole position or a rotational speed of the electrically operated machine.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kabayashi et al. (US 2005/0046369 A1) and Yamaguchi (US 6,906,442 B2) both teach related electric drive control method and apparatus using a motor utilizing a magnetic torque.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yonel Beaulieu whose telephone number is (571) 272-6955. The examiner can normally be reached on M-W 9-3; F 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas BLACK can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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